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Aviation: All about the Culture

BG TIMOTHY J. EDENS and LTC CHRISTOPHER PRATHER U.S. Army Combat Readiness/Safety Center Fort Rucker, Ala.

Our Aviation warriors are continuing a phenomenal trend of safely operating through high operations tempo and declining budgets. While we have seen an overall decline in mishaps from fiscal 2012, we are experiencing ongoing trends in human error, a possible result of the rapid development of new technology that has fundamentally changed the nature of work within and on our aircraft. While these advances enhance our operational capability and help mitigate potential mishaps, they require a tight coupling between technical subsystems and our aircrews.

Accidents during the past year have shown that failure of either the technology or the human can often cause a failure of the entire system. Investigations have shown that determining the causes of system failure is extremely crucial to preventing future accidents.

Causation progresses through several stages, the first of which is a technical period where new mechanical systems, due to their rapid development, may malfunction and result in an accident. We're in the midst of a second stage, one of human error, where faults of the human operator — not catastrophic mechanical malfunctions — are surfacing as a source of mishaps and fatalities. This is not to say mechanical malfunctions don't happen; rather, it's the preponderance of human error-based causal factors that make it obvious we're in this stage.

Building a proactive safety culture is the single-best "cure" for this issue, and leaders should be working on four primary elements that can help their unit reach a mature safety culture.

Crewmembers

One of the major sources of problems in aviation stems from the history of flight and its consequences for the attitudes of those who fly. In American culture, pilots have generally been regarded as elite, capable and self-sufficient, not necessarily the type of individuals willing to admit to failure. Within this context, pilots are often reluctant to confess their mistakes; some leaders, themselves aviators, might not want to hear about errors and even regard those who make them as poor pilots.

An aviation unit with a truly proactive safety culture is very different. Errors are willingly and openly reported, with causes thoroughly investigated in an after-action review that's shared with the unit. When regulations and standing operating procedures are disregarded or checklists skipped, unit personnel work together to solve the problem.

In a proactive safety culture, aviators are constantly applying the risk management process to determine whether to continue the mission or turn back when problems that put mission or force at unacceptable risk arise. Instead of blindly following predetermined plans, pilots develop

sophisticated, real-time decision-making processes based on proven risk mitigation strategies.

Cabin Crew

Non-rated crewmembers personify the safety culture in the way they convey their attitudes while securing the cabin area, conducting their duties, and caring for their passengers. Through their interactions with passengers and others, cabin crews are the public face of the aviation unit and its safety culture.

Non-rated crewmembers are actively involved in a proactive safety culture. They are the individuals who are most often convinced and, by extension, convincing when safety issues arise in flight. They are the over-the-shoulder voice of safety reason when working as an integrated team with their pilots.

Maintainers

Maintainers, especially when deployed, often work under continuous time pressure, nowhere more than in overnight repair operations. The consequences of failures by maintainers are often more devastating than those by pilots, as these failures are often impossible to "fly out."

Maintainer professionals, like all Army Aviators, are all too aware of just how dangerous aviation is and are rarely willing to take risks. Yet investigations reveal that errors still occur, especially unintentional omissions. Like pilots, maintainers have considerable autonomy, and this can easily create a culture in which trust and open sharing of information is not as common as leaders want in a well-developed safety culture.

Leaders

The final element of a proactive safety culture is leadership and management. Army Aviation is fortunate because, unlike much of commercial aviation, our leaders are pilots and have experience as non-rated crewmembers, maintainers, and in-flight operators. They've acquired the "gut" safety imperative that's given Army Aviation an amazing reputation over the years.

We can capitalize and enhance this positive difference if our leaders continue to ensure that safety culture is part and parcel of what the unit is, not just what it does. Safety isn't hard – it's about knowing what's right and doing what's right. That mantra applies to every Soldier in our Army, not just aviators.

Our pilots and crewmembers, however, often have the most to lose, so it's therefore imperative for them to keep safety at the forefront of each and every mission. An environment where leaders encourage their crews to learn form one another's mistakes, talk openly about safety issues and "live the talk" will go a long way toward maintaining Army Aviation's hard-earned safety reputation and saving lives.

Fly smart, and remember – Army Safe is Army Strong!

BG Edens is the Director of Army Safety and commanding general, U.S. Army Combat Readiness/Safety Center. LTC Prather is the Aviation Director, USACR/Safety Center. This article first appeared in the June 30, 2013 issue of ARMY AVIATION - the official journal of the Army Aviation Association of America (AAAA).



Conservative Approach

CW5 Steven D. Lott Directorate of Evaluation and Standardization U.S. Army Aviation Center of Excellence Fort Rucker, Ala FW SP

Every time an army aircraft crashes, the enemy scores a victory. It doesn't matter what caused the accident, whether it was in combat, or a routine training mission; whether it was pilot error or mechanical failure. The fact is, especially in the current fiscal climate, when we damage our equipment or hurt our soldiers, the enemy gains an advantage. Any real or perceived weakening of our force emboldens our current enemies, and encourages future enemies.

I recently read an OIL paper (Operations Insights and Lessons Learned) from one of the Staff Course students here at Fort Rucker. The concern was that when it comes to taking the most conservative approach to mission planning and execution, commanders and pilots alike are talking a good game, but essentially doing the exact opposite when it comes to decision making. They're flying in weather they shouldn't, and ignoring crew rest policies, etc. The viewpoint was that the current culture in Army aviation supports the aggressive aviator, and punishes the conservative one. There is tremendous pressure from commanders to get the mission done, even in garrison doing training flights. My question is: how many accidents will it take for people to learn why **the most conservative response** is in the army lexicon?

Of course there are times when you will have to accept the high risk missions. The level of acceptable risk is proportional to the priority of the mission. If you have a real world MEDEVAC mission, that's a huge priority. If you don't go, someone could die. On the other hand, if you are trying to get an APART done, RL progression or a routine training flight, there is no excuse for taking undue risk. The worst possible outcome of a canceled flight is the commander may have to grant an extension. The equipment is safe in the barn, everyone goes home that night but you have to bug the commander for a signature. The boss will get over that. If you damage or destroy an aircraft, the commander probably won't get over it, and it's likely you won't be going home that night. We all seem to know this, but when it comes to applying it to mission planning and execution, many seem to fall short.

I once told a platoon leader I was going to delay a training flight until the weather improved. I was with an RL3 aviator and our airfield had nothing but an NDB approach at the time, so my experience and 175-1 told me it was best to slow back a bit. I was taking the most conservative approach. What was his response? Without looking at my weather brief, he ran over to the window and said: "The weather doesn't look that bad to me!" I had to hold back what I really wanted to say, but I had to wonder what made a person of such little experience in aviation feel it was OK to say that to one of the most experienced aviators in the unit. I could sit and point fingers all day long, and blame any number of people, or blame the command climate, but the truth is, I was on the blame line myself. Our job as aviators is to mentor other aviators, especially the ones who make decisions for the rest of us. The culture that either encourages or discourages overly aggressive behavior has to start somewhere. We've tried the top down approach; maybe we need to start from the bottom up. We need to focus on mentorship for our aviators and future leaders,

based on proven risk mitigation strategies. If we're not leading by example as the senior aviators, we're partly to blame for the toxic or dangerous culture that results.

We can all agree that Army aviation is no place for the timid. But it's no place for reckless cowboys either. Unfortunately, there are a small number of Army aviators that fall into the latter category. Commanders need to identify them, and try to correct the problem before their behavior starts to spread to other aviators. It's the brash and bold aviators that seem to have the most influence on the younger crowd. The less experienced aviators look at them with a great deal of awe and admiration. Some will begin to follow in the footsteps of these types very quickly if someone or something doesn't intervene. Sometimes being in the air and wishing they were on the ground a few times will do the trick. Maybe a failed check ride or a word from the commander will get them on track. Sometimes it takes a bit more drama.

The boldest of aviators become very meek and humble if they live long enough to meet the accident investigation team. There are two primary reasons for this. First, they are made suddenly and violently aware that they are not as good as they thought they were (assuming it was pilot error). Second, they realize that the United States Army is seriously considering bestowing on them the scarlet letter of a failed aviator. Unless you've been through it, you probably don't know the stress that comes from having that microscope focused on you, and no one but an aviator knows the shame that would come from having the wings torn off your chest. This shame, of course, pales in comparison to how they'd feel if they got one of their own injured or killed. Ask your spouse and kids sometime if they'd rather you were an old aviator or a bold aviator.

Army aviation is an inherently dangerous business, and accidents are going to happen; however, ignoring the most basic principles of aviation safety makes the problem far worse than it needs to be. If you're briefing a mission, brief the mission, don't just read the script and send the crew out the door. Mission briefers and approvers should be critical of all aspects of mission planning, weather, crew rest, crew mix, currency, etc. If someone is too tired to fly, it doesn't matter how many hours they had off before their duty day. In some states driving tired is considered a criminal offense, why do people think that it's OK to fly a mission tired? Legal weather is not necessarily smart weather. A pilot shouldn't be shamed into accepting a mission because a weather guesser thinks the weather will improve. How many IIMC accidents have we had in the Army? If you say you're going to make the most conservative response in your crew brief then come home with hail damage, you probably didn't. Taking the conservative approach does not mean the mission won't get done, it just means we'll have less accidents and fewer fatalities in the process.

--CW5 Steven D. Lott, DES SP, may be contacted at (334) 255-2453, DSN 558.

Class A – C Mishap Tables

	Manned Aircraft Class A – C Mishap Table as of 15 Jul 13									
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	Month	Class A Mishaps	Class B Mishaps	Class C Mishaps	Fatalities		Class A Mishaps	Class B Mishaps	Class C Mishaps	Fatalities
	October	2	2	6	1		1	0	7	0
1st Qtr	November	0	1	13	0		0	1	3	0
1st	December	2	2	6	4		2	1	0	0
<u>.</u>	January	2	0	12	0		0	0	5	0
2 nd Qtr	February	2	1	6	0		0	0	2	0
200	March	1	3	11	0		3	1	5	7
_	April	2	1	6	4		1	1	6	2
3rd Qtr	May	1	0	4	0		0	0	4	0
3.0	June	1	0	2	0		1	0	3	0
L	July	3	3	9	1		1	0	1	
4 th Qtr	August	2	4	8	0					
<u></u> ‡	September	1	0	3	2					
	Total					Year to				
	for Year	19	17	86	12	Date	9	4	36	9

UAS Class A – C Mishap Table as of 15 Jul 13											
	ı	FY 12 UAS N	lishaps			FY 13 UAS Mishaps					
	Class A Mishaps	Class B Mishaps	Class C Mishaps	Total		Class A Mishaps	Class B Mishaps	Class C Mishaps	Total		
MQ-1	5	1		6	W/GE	2	1	0	3		
MQ-5	1		3	4	Hunter	2	0	3	5		
RQ-7		5	20	25	Shadow	0	1	9	10		
RQ-11					Raven						
RQ-20			4	4	Puma	0	0	5	5		
YMQ-18											
SUAV			1	1	SUAV						
Aerostat	2	5		7	Aerostat		1	1	2		
Total for Year	8	11	28	47	Year to Date	4	3	18	25		

Mishap Review: AH-64D Day Reconnaissance

While conducting a multi-ship reconnaissance mission, the AH-64D, flying at 94 KTAS and approximately 2000 feet AGL, suffered a catastrophic in-flight failure resulting in destruction of the aircraft and two fatalities.

History of flight

The mission was a scheduled two-ship security/reconnaissance mission in day and night vision device conditions in a mountainous environment. The aircrew met the crew chief at the aircraft at 0400 hours and completed their pre-flight. At 0500 hours the crew received their mission brief to include S-2, weather brief, and TACOPS/S-3 brief. The initial mission set called for a base security flight with a follow-on area security/recon mission in support of friendly forces. Weather was few clouds at 9,000 feet with a broken



ceiling at 19,000. Visibility was unrestricted. Winds were 280/03 knots. Temperature of +17C and PA approximately +5000 feet.

The flight departed at 0600L, completed the security sweep and shutdown at approximately 0700L to await the follow-on mission. No problems were noted with the aircraft and the aircrews updated their weather. After a short break the crews completed thru-flight inspections, cranked and departed home base at 0750L with the accident aircraft in the trail position. The team conducted recons of various checkpoints in support of ground forces for the next hour and ten minutes. At approximately 0900L, while Chalk 2 was providing high security over watch for the lead aircraft, radio contact was lost between the two aircraft. Shortly thereafter lead aircraft observed a fire on the ground. A subsequent search of the area revealed the crash site of the trail aircraft.

Crewmember experience

The PC, sitting in the rear seat, had more than 2,200 hours total flight time, with 1,900 in the AH-64 (950 as an IP/IE) and 600 hours NVD time. The PI, flying in the front seat, had 400 hours total time, 270 hours in the AH-64D and 120 hours NVD time.

Commentary

Investigation of the accident is ongoing. The accident board suspects a materiel failure in the main rotor system caused a loss of control and subsequent crash of the aircraft. The aircraft was destroyed and the two pilots were fatally injured. Tear down analysis of recovered aircraft components is being completed to determine the cause of the failure.

All information contained in this report is for accident prevention use only. Access the full preliminary report on the CRC RMIS under Preliminary CAI Reporting https://rmis.safety.army.mil/ AKO Password and RMIS Permission required.

Mishap Review: OH-58C Autorotation

During the conduct of a simulated engine failure (SEF), the aircraft struck the runway surface in a level attitude, breaking off both skid tubes and coming to rest on its left side.

History of flight

The mission was a scheduled Commander's Evaluation flight for a newly arrived aviator. The mission involved evaluation of 1000 series



aircrew training manual (ATM) tasks. The flight had been scheduled and approved by the flight detachment commander.

The crew's duty began at 0900 hours. Academic training was conducted from 0930 -1030 followed by the aircraft preflight. No problems were noted with the aircraft. Weather was clear skies with 7 miles visibility. Winds were 250/10-20 knots and temperature of +40C.

The flight departed at 1340L with various hover drills, hovering autorotations, and OGE checks being accomplished. The crew then conducted simulated engine failure training. The first two iterations were terminated by power recovery IAW the ATM. The third SEF was initiated at 2500 feet AGL at 80 knots. The IP instructed the PI to conduct a 360 degree turn to plan a landing to the intersection of the two runways. The PI flew the maneuver as directed and rolled out at 500 feet AGL lined up with the runway. The IP instructed the PI to terminate with power at a 3 to 5 foot hover over the runway. During the aircraft's deceleration the low rotor RPM audio warning sounded. The IP took the controls, rolled the throttle to the full open position and applied power to arrest the descent but the aircraft struck the runway's surface and spun to a stop resting on its left side. There were no injuries.

Crewmember experience

The IP, sitting in the left seat, had more than 3,900 hours total flight time with 1,800 hours as an instructor pilot and over 1,200 hours in the OH-58A/C. He had recently completed his RL progression. The PI, flying in the right seat, had over 1,500 hours total time including 389 hours as a PIC. This was his first flight in an OH-58C since graduation from flight school seven years prior.

Commentary

The accident board determined the crew failed to confirm the throttle was full open and the N2 RPM was at 100% prior to 200ft AGL. As a result, when the PI began to apply aft cyclic and increase collective pitch to slow the rate of descent, the rotor RPM decayed and the aircraft struck the ground and was destroyed.

All information contained in this report is for accident prevention use only. Additional information may be found on the CRC RMIS at https://rmis.safety.army.mil/ AKO Password and RMIS Permission required.

Know your unmanned aircraft

MQ-5B HUNTER UAS Unmanned Aircraft Systems

The Hunter (MQ-5B) UAS is used in support of Army Aerial Exploitation Battalion for RSTA and is the Army's longest serving Corps/Division level UAS. The Hunter's imagery system allows data to be processed in a matter of seconds, providing virtual, real-time information of battlefield conditions/targets. Hunter's enhanced imaging system allows commanders to detect, identify, and track hostile activity/targets for external weapons systems or maneuvers and battle damage assessment; thereby enhancing the commander's ability to locate and identify friendly forces to avoid unnecessary loss of life and locate enemy targets.



Wing Span	Weight	Range	Airspeed	Service Ceiling	Endurance	Primary Payloads	Launch/ Recovery	Propulsion System	Center Wing Configuration
34.5 ft	1,950 lbs	>200 km	62 Kts cruise 110 Kts Dash	18,000 ft	25 hours with EO/IR	Max weight 275 lbs 770 EO/IR 80 lbs	Unimproved Runway 1,600 ft	Heavy Fuel	Wet Extended Center Wing

Visions of the Past, Bringing Lessons to the Future









Hunter System MTOE Configuration

- Five (5) Air Vehicles
- · Four (4) Quad Sensor Payloads
- Three (3) One System Ground Control Stations
- Two (2) Ground Data Terminals (Antenna)
- One (1) Launch Recovery Terminal (Antenna)
- One (1) Backup Generator Mounted on HMMWV
- One (1) World Wide Power Interface Unit Mounted on HMMWV
- Four (4) One System Remote Video Terminals

- Five (5) Mobile Power Units (Generators)
- One (1) 5-Ton POL Truck
- Two (2) 5-Ton Crane Trucks
- One (1) 5-Ton Flatbed Truck
- Two (2) 5 Ton Trailers
- One (1) HMMWV Personnel/Equipment Transport
- Two (2) HMMWV Cargo Trailers
- One (1) Mobile Maintenance Facility

Hunter Capabilities

- Supporting Theater Conflicts 1999 to present
- Extended Range/Endurance UAS
- Highly Redundant Mission/Propulsion Systems
- Integrated with One System GCS
- Outstanding Target Location Accuracy

- Versatile Payload Platform: 35 Demos
- Multiple Mission Configurations
- Stellar Overseas Performance
- Target Designation/Attack Capable
- Deployed to both theaters OIF/OEF
- C-17 & C-5 Transportable



Project Manager
UAS Project Office
(SFAE-AV-UAS)
Redstone Arsenal, Alabama 35898



Blast From The Past

Articles from the archives of past Flightfax issues

The life you save may be just about anybody's 20 Jan 1982 Flightfax

Back in the days of the war in Korea, an aviation unit adopted as its slogan: "We fly when the ducks are grounded." Stout chaps, those. The kind who are always ready to tell you they can get any job done . . . no matter what.

On the other hand, who ever heard of an off-course, disoriented duck running head-on into a mountain during a monsoon? When a duck reaches the sensible conclusions that things are considerably more hairy than he can handle, he looks around for the nearest pond on which he can paddle around until it is safe take off again.

There is another tired old slogan you can see on people's desks: "The difficult we do immediately. The impossible takes a little longer." Considerably longer.

Few people ever undertake what is clearly impossible provided they stop to give it some hard-nosed, mature thought in advance. It may turn out, too, that a problem which looks impossible at first glance can be cracked if you think about it long enough. After all, Mount Everest finally was climbed. Men have walked on the moon.

That's the bright side. There's a dark one. For every glowing triumph there have been dismal failures because people undertook some task they either didn't understand, failed to prepare for, or weren't able to do in the first place.

As often as not it wasn't their fault. They were asked or ordered into waters so far over their heads they sank without a trace.

If it's worth doing . . .

. . . It's worth doing in bang-up style, right? Take the case of Army aviation missions. Anything – repeat, **anything** – can be fouled up by just one person doing the wrong things in the wrong place at the wrong time. It doesn't matter whether he is the top person on the totem pole or the guy at the bottom holding everybody else up. If he is unequal to his assigned task, fails to give it the attention and planning it demands, isn't properly briefed as to what the mission is all about, or allows haste and distraction to interfere with proper execution, the result is almost certain to be a can of worms which could best be given the code name Operation Total Loss.

But let's take it as a matter of faith that professional pride makes every aviator anxious to do his job well and also that everybody is responsible enough to want to see it through to a safe, successful conclusion. No argument, there. At the same time, let's face the fact that not every mission comes up smelling like roses. Things go wrong which, by rights, shouldn't. How come?

One easy answer given in Vietnam – but not always the correct one, by any means – was that in combat, aviators, like everyone else, sometimes were forced to undertake assignments with considerably less than the comfortable safety margins normal prudence called for. In the heat of battle, extraordinary risks had to be assumed. There were times when the gamble failed to pay off. It is also true that in 'Nam, as in every war, overaggressive commanders on occasion made sitting ducks out of aviators in their attempt to carry out missions of dubious value which probably shouldn't have been attempted in the first place.

This isn't the sort of thing which happened every day. It serves to demonstrate, however, that if

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there is a gap in communications or understanding anywhere along the line in mission conception or planning, the operation can be in deep trouble from the start.

That's one important side of mission planning. Another pitfall in the same area comes as a result of what expert marketing managers call "impulse buying" – the kind of shopping binge which can fill a grocery basket with unneeded items and shoot a month's budget to shreds in a matter of minutes. Impulse missions are a good deal worse. A typical one took place on a dark and stormy night when two aviators of limited experience were ordered on a medevac mission to pick up two injured Soldiers in the hills. You probably won't be surprised to learn that on the way back they flew into a hill and nobody aboard ever returned to base. The ironic fact was that one of the men they picked up had a broken arm and the other was suffering from a minor cut. Both could have waited until daylight – and survived.

Needless losses of this sort stand as tragic testimony to the fact **that a failed mission is worse than no mission at all.** Sometimes much, much worse.

How can you guarantee the success of any mission? You can't, of course. In any operation in which a number of fallible human beings are involved, so many things can go wrong nobody would want to bet there won't be some sort of monumental snarl before the day is out.

But, what the heck, just about everything involves an element of risk. People manage to break their necks just by taking a shower in their own bathroom.

Just the same, risks can be cut down to bare bone, and where Army aviation missions are concerned, the place to start the whittling process is at the command planning level. In fact, mission planning and supervision are essential parts of a sound management program. An aviation unit can no more do without these professional tools than Jack Nicklaus could his golf clubs.

What goes into sound planning will differ in detail and volume depending on the mission, but planning is planning. You cover all the bases.

Aside from the painstaking blueprinting for the mission's execution, there is the matter of analyzing the mission itself. Is it really necessary or even worthwhile? Have alternate courses of action been considered? Has everything that could be done to identify and evaluate the hazards involved been done? Has everything that can be done to reduce and control the risks been done? Does everyone have a thorough understanding of the mission and the risks involved?

If all systems are go at this point, the next hurdle comes with the business of carrying out the mission, which is a little like saying that once you have read the simple instructions all you have to do is fit the pieces together to build yourself a Rolls Royce in your basement.

The truth is that once the whistle blows, the risks start coming at an aviator like a gang of downfield tacklers zeroing in on a punt returner. If he doesn't handle the ball with professional slickness, he knows he will end up face down on the turf under a half ton or so of enemy linemen. If an aviator falls down on the job there's a good chance he may find himself under a couple of tons or so of thoroughly junked helicopter.

Sic 'em tiger

Everybody who has been in the Army long enough to draw his first paycheck knows that enthusiasm for flying is part of every successful aviator's makeup. He takes pride in his job and he wants to do it well. Nobody is going to argue with this healthy attitude.

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As long as it stays healthy, that is. It starts getting a little green around the gills when it is carried the one fatal step into overconfidence, to the point where a person's professional pride is transformed into his desire to demonstrate to anybody around – and sometimes himself – how good he really is.

Any aviator who manages to slide into this dangerous state is a large package of **real** bad medicine. Mishap prone? He's loaded for bear so far as mishaps are concerned, that's for sure, and unless he is disciplined or grounded, he will wind up a short but thrill-packed career.

There is something equally capable of gumming up the works of any mission and that's pressure, or stress, or tension or whatever you want to call it. Every worthwhile enterprise has some sort of goal, and a person working toward a goal with only a fixed (and not always as much as he wants) time to do it in is a person working under pressure.

If an aviator is carrying an overload of pressure, he is a good deal more likely to make a big mistake than the carefree soul who has nothing to do and all day long to do it in.

Heat of battle

A fair amount of enthusiasm, and the excitement which simulated combat or other types of missions induce, is not only unavoidable but is desirable. Even a simple undertaking such as a cross-country training flight is more likely to have a happier ending if it is approached by an aviator who has an enthusiastic rather than a ho-hum attitude. The point is to adjust the enthusiasm to the point where it constitutes a blessing rather than a burden.

Here's where a good management and supervisory program comes back into the picture. Planning a unit mission is management's job, but before the blades begin turning, the razor-sharp execution required to reach the assigned goals becomes management's principal concern.

Mission possible sense

Basically, it comes down to rigid insistence on strict by-the-book procedures plus constant supervision designed to spot and correct the aviator who is about to be swept off his feet by his own emotions the way Romeo was the first time he laid eyes on the fair Juliet.

At the heart of every worthwhile management program is the realization that the ultimate goal is the successful completion of missions. That's pretty much what military aviation is all about — whether it is the deadly business of combat, rescuing stranded people in flooded disaster areas, ferrying aircraft, or countless other tasks an Army aviator can expect to be called on to perform. Nobody knows what the call will be tomorrow, but it's good sense to be prepared for anything.

No easy task, that. Mission impossible, you might say. Not at all. Sure, you could worry yourself into premature old age by trying to put down in black and white everything the future holds, but the kind of horse sense most of us are born with keeps us from such idiocy. Instead, we prepare ourselves by learning well, and sticking by accepted, established procedures which have stood the test of time in and out of the heat of battle.

And that's what a mission-conscious management program's training is built around. Good training makes for good flying habits.

Lone eagle

Once the blades start going around, every Army aircrew is a team functioning on its own to a

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marked and critical extent. A coach can't take the field with his team. The best management and supervision in the world can go only so far. After that, the success of a mission depends on the self-discipline, skills, and judgment of the people in the aircraft.

Out in the field, pilots are likely to have a total leeway in the matter of exercising their judgment about whether to go or not to go and what to do or not do in a particular situation. If their training has been thorough and if they are safety-conscious and disciplined enough not to allow overconfidence, misplaced enthusiasm, tension, or simple fatigue to override their skills, they'll come through with flying colors. One lapse in any direction can set off a chain of events which will bring their well-planned mission to a dismal end.

Take the matter of fuel management. A simple matter, to be sure. Yet you might be surprised to know how may missions failed because the fuel tanks went dry at the worst time, the way a motorist who should know better always manages to run out of gas five miles from the nearest filling station.

Or the missions which come to grief simply because a weary crew, taking honest pride in a long day's work well done, failed to remember that no flight is at an end until the aircraft is safely on the ground and the engine is shut down. A person who is looking forward to an evening of rest and relaxation involving a thick steak and perhaps a few short beers is ripe for a last-moment letdown which will make his evening turn out a good deal differently from what he had hoped.

All in the family

Every Army aircraft mission involves the skilled services of a considerable number of people. The fact that most missions are successfully completed is testimony to the generally high level of management programs, supervision, unit training, and individual responsibility of crewmembers and maintenance personnel. That's just the way things should be.

The silver lining, you could say. Less shiny is the fact that missions sometimes do fail and the cause can be traced to an error somewhere along the line committed by men trained to know better. Commanders or subordinates, senior pilots or young aviators just out of flight school – statistics prove that nobody carries a gold-plated card guaranteeing he won't be the one who will bring the next mission to an untimely end.

It's something to think about. Think about it while you are planning your next mission.

Think Mission all the way.

It's almost a fulltime job. If you do it well, the life you save may be just about anybody's.

Discipline is the most important attribute of an Army aviator or crewmember. <u>Learned discipline</u> allows inexperienced aviators and crewmembers to overcome a deteriorating tactical situation or unexpected weather conditions. <u>Unwavering discipline</u> keeps a midlevel aviator from attempting maneuvers beyond his capabilities and from placing his crew in situations of unnecessary risk. <u>Discipline enhanced by experience</u> allows senior aviators and crew chiefs to make solid recommendations to air mission commanders and influence the actions of fellow crewmembers.

Selected Aircraft Mishap Briefs

Information based on Preliminary reports of aircraft mishaps reported in June 2013.

Utility helicopters

UH-60 🔽



- -L Series. Aircraft landed hard during air assault. Damage to the airframe and tail boom reported. (Class A)
- -A Series. Damage to trailing edge of stabilator, searchlight assembly, and FLIR discovered on post-flight following dust landing training. (Class C)
- -A Series. During NVG sling load training the HMMWV load separated during climbing recovered. (Class C) left turn. Vehicle was destroyed. (Class C)

Observation helicopters



On an approach to a ridgeline aircraft landed hard. Damage to the tail boom and tail rotor reported. (Class C)

Unmanned Aircraft Systems

RQ-20A



UA initiated an uncontrolled descent after two minutes of flight at altitude. UA contacted the ground and was not

NOT TOO LATE

Complete the online Flightfax Reader Survey

The online version of Flightfax is just over two years old. In an effort to keep current with the field, we need your feedback. Please take a few minutes and complete the Flightfax Reader Survey located at:

https://tools.safety.army.mil/Survey/TakeSurvey.aspx?SurveyID=8IKJ7p8 (You may have to copy and paste into your browser).

"How can we improve Flightfax or make it more relevant to your needs?" - is the information we're seeking.

If you can't do the online survey, feel free to respond with your input via email to the Aviation Directorate, U.S. Army Combat Readiness/Safety Center: usarmy.rucker.hqda-secarmy.mbx.safe-flightfax@mail.mil

If you have comments, input, or contributions to Flightfax, feel free to contact the Aviation Directorate. **U.S. Army Combat** Readiness/Safety Center at com (334) 255-3530; DSN 558



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